

# COMMONWEALTH of VIRGINIA

# DEPARTMENT OF ENVIRONMENTAL QUALITY

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Chief, Rules and Directives Branch Division of Administrative Services Mail Stop TWB-05-B01M U.S. Nuclear Regulatory Commission Washington, D.C. 20555-001

RE: Draft Supplemental Environmental Impact Statement for the Combined License (COL) for North Anna Power Station Unit 3, Louisa County, (DEQ 09-001F).

## Dear Sir/Madam:

The Commonwealth of Virginia has completed its review of the December 2008 Draft Supplemental Environmental Impact Statement (received January 5, 2009) for the above referenced project. The Department of Environmental Quality is responsible for coordinating Virginia's review of federal environmental documents and responding to appropriate federal officials on behalf of the Commonwealth. DEQ is also responsible for coordinating Virginia's review of federal consistency documents submitted pursuant to the Coastal Zone Management Act (CZMA) and providing the state's response. The following agencies participated in the review of this proposal:

Department of Environmental Quality
Department of Game and Inland Fisheries
Department of Conservation and Recreation
Department of Agriculture and Consumer Services
Department of Mines, Minerals and Energy
Department of Health
Department of Forestry
Department of Historic Resources
Department of Transportation
Thomas Jefferson Planning District Commission

The Marine Resources Commission, Department of Emergency Management, Department of State Police, Virginia Institute of Marine Science, Louisa County, Orange County, Spotsylvania County, Hanover County, Town of Mineral, George Washington Regional Commission, and Rappahannock-Rapidan Planning District Commission were also invited to comment on the proposal.

#### PROJECT DESCRIPTION

On November 27, 2007, the U.S. Nuclear Regulatory Commission (NRC) received an application from Dominion Virginia Power and Old Dominion Electric Cooperative, collectively known as Dominion, for a combined license (COL) for the North Anna Power Station (NAPS) site (Dominion 2007). The NAPS site is located approximately 40 miles north-northwest of Richmond in Louisa County, Virginia. A COL, which encompasses both a construction permit and an operating license, is a Commission approval to build and operate one or more nuclear power facilities. In its application, Dominion specified the Economic Simplified Boiling-Water Reactor (ESBWR) as the proposed design for the new reactor, designated Unit 3, to be constructed and operated at the NAPS site.

The COL application references an early site permit (ESP) for the North Anna ESP site, which is located on the NAPS. In November 2007, NRC approved issuance of the ESP for two additional nuclear units at the NAPS ESP site. This approval was supported by information documented in the ESP final Environmental Impact Statement (ESP EIS) (NRC 2006). The ESP permit, ESP-003, was issued to Dominion by the NRC on November 27, 2007 (NRC 2007a). For a COL application that references an ESP, the NRC staff, pursuant to 10 CFR) 51.75(c), prepares a supplement to the ESP EIS in accordance with 10 CFR 51.92(e). The NRC relied upon the analysis in ESP EIS as the basis in preparation of the supplemental EIS (SEIS).

Included in the SEIS are (1) the results of the NRC preliminary analyses, which consider and weigh the environmental effects of the proposed action and of constructing and operating a new nuclear unit at the NAPS site; (2) mitigation measures for reducing or avoiding adverse effects; (3) the environmental impacts of alternatives to the proposed action; and (4) the NRC's recommendation regarding the proposed action based on its environmental review. The COL application references an ESP, so where appropriate, the SEIS adopts results of the environmental review conducted in support of the ESP application and incorporates those results by reference.

In the ESP ER (Dominion Nuclear North Anna, LLC 2006a), Dominion Nuclear North Anna, LLC stated that no alterations to the transmission system would be required. In its COL ER (Dominion 2007a), Dominion indicated that an additional 500-kV transmission line, within the existing Ladysmith right-of-way would be required to ensure system reliability. The new transmission line is expected to be approximately 15 miles long; the existing right-of-way is approximately 275 feet wide, and will not need to be expanded to accommodate the new proposed transmission line.

#### CONCLUSION

Reviewers indicated that the draft SEIS did not address the Instream Flow Incremental Methodology study conduced by Dominion in cooperation with state natural resource agencies, including a discussion of the proposed operating rules developed from the study, particularly with respect to the effect of the potential three inch rise in normal lake storage. Other omissions that should be adequately addressed in the final SEIS include a discussion of the small whorled pogonia as it occurs on upland sites, a discussion of the expected traffic distribution (for construction-related traffic and for operations) and the effects upon the state highways and intersections, and the discussion of an updated evacuation plan that addresses the area of impact in the event of an emergency.

## **ENVIRONMENTAL IMPACTS AND MITIGATION**

1. Water Quality & Wetlands. According to the SEIS (page 4-4, 4.3.1), excavation, fill, and grading operations that will occur during construction of the proposed Unit 3 would alter two of three ephemeral streams on the NAPS site, and possibly one or more wetlands. Wetland delineations and jurisdictional determinations of the upland landscape and submerged lake areas that would be impacted by construction would be required in order to submit an application for a Section 404 Permit application to the U.S. Army Corps of Engineers (Corps).

The SEIS (page 5-5, 5.3.3) states that new information available since preparation of the ESP EIS includes additional information on the ambient water quality in Lake Anna, a description of plant water treatment methods and chemical additives, blowdown flowrates, and expected chemical concentrations in the plant discharge. According to the document (page 5-5, 5.3.3), the discharge water-quality parameters for the proposed Unit 3 is within (equal to or less than) the range of plant parameter envelope (PPE) values evaluated for the ESP. The NRC concludes that the impacts of operating the proposed Unit 3 on water quality would remain small. Pollutant discharges would be regulated under a Virginia Pollutant Discharge Elimination System permit issued by the Commonwealth of Virginia.

1(a) Agency Jurisdiction. The State Water Control Board (SWCB) promulgates Virginia's water regulations, covering a variety of permits to include Virginia Pollutant Discharge Elimination System (VPDES) permit, Virginia Pollution Abatement Permit, Surface and Groundwater Withdrawal Permit, and the Virginia Water Protection Permit (VWPP). The VWPP is a state permit which governs wetlands, surface water, and surface water withdrawals/impoundments. It also serves as § 401 certification of the federal Clean Water Act § 404 permits for dredge and fill activities in waters of the U.S. The VWPP Program is under the Office of Wetlands and Water Protection/Compliance, within the DEQ Division of Water Quality Programs. In addition to central office staff that review and issue VWP permits for transportation and water withdrawal projects, the

seven DEQ regional offices perform permit application reviews and issue permits for the covered activities.

## 1(b) Agency Comments.

## Virginia Water Protection Permit

The SEIS recognizes the need for permitting of potential impacts to wetlands resulting from the construction and/or operation of Unit 3. According to the DEQ Office of Wetlands and Water Protection (OWWP), the report states that Dominion Virginia Power has conducted a wetland delineation to determine the location, extent, and type of surface waters present, and that approximately 6.68 acres of wetland, 5,500 linear feet of stream and 2.49 acres of open water have been identified within the proposed construction footprint. The report also states that permanent disturbance may be limited to less than 0.5 acre of non-tidal wetland and less than 800 linear feet of stream within the site footprint. State- and federal-listed threatened and endangered species were identified as potentially occurring on the site.

## Virginia Pollutant Discharge Elimination System

According to the DEQ Northern Regional Office (NRO), the SEIS discusses many issues that will be addressed as part of the modification of Dominion's existing VPDES permit. The final VPDES permit determination will be dependent on the Dominion's application.

## 1(c) Agency Findings.

## Virginia Water Protection Permit

Based on a review of the location map provided with the SEIS, DEQ is unable to determine the exact quantity of wetland and stream impacts. However, because impacts are proposed to wetlands and streams, this project will likely require a Virginia Water Protection Permit. DEQ-NRO agrees with the technical and regulatory discussion in the SEIS and finds no reason to suggest a VWPP could not be obtained. The DEQ-NRO VWPP program will make the final permit decision regarding potential impacts to state waters.

### Virginia Pollutant Discharge Elimination System

DEQ agrees with the technical discussions in the SEIS and has no technical or regulatory reasons to suggest that a modification could not proceed.

## 1(d) Requirements.

## Virginia Water Protection Permit

The wetland delineation should be confirmed by the U.S. Army Corps of Engineers (Corps). In addition to contacting the Corps for the wetland confirmation, Dominion must contact the DEQ Virginia Water Protection Permit program to determine the necessity of the VWPP(s). Coordination of this project should be conducted with the Virginia Marine Resources Commission, the Corps and DEQ through the Joint Permit Application (JPA) process. The JPA must include documentation of all avoidance and minimization efforts and a conceptual plan for appropriate compensatory mitigation. Avoidance and minimization of wetland and stream impacts should occur to the maximum extent practicable.

## Virginia Pollutant Discharge Elimination System

Dominion must request a permit modification from DEQ-NRO before it can proceed with construction of Unit 3, as acknowledged in the SEIS.

**1(e) Recommendations.** DEQ-OWWP offers the following recommendations with respect to anticipated water quality and wetlands impacts:

- Coordinate closely with DEQ regarding mitigation options as they are considered and developed.
- Examine onsite mitigation options to compensate for unavoidable permanent wetland impacts and conversions or purchase of credits at a mitigation bank within the watershed of the proposed impacts.
- Consider mitigating impacts to forested or converted wetlands by establishing new forested wetlands within the impacted watershed.
- Restore temporary impact areas to their original contours and revegetate with the same or similar species.
- Coordinate with the Virginia Department of Game and Inland Fisheries and/or the U.S. Fish and Wildlife Service regarding presence of endangered or threatened species and/or habitat, prior to seeking a permit from the Virginia Water Protection Permit Program.
- Coordinate with DEQ-NRO regarding the Virginia Pollutant Discharge Elimination System permit that will be required for the proposed discharges to Lake Anna.

In general, DEQ recommends that stream and wetland impacts be avoided to the maximum extent practicable. To minimize unavoidable impacts to wetlands and waterways, DEQ recommends the following practices:

- Operate machinery and construction vehicles outside of stream-beds and wetlands; use synthetic mats when in-stream work is unavoidable.
- Preserve the top 12 inches of trench material removed from wetlands for use as wetland seed and root-stock in the excavated area.
- Erosion and sedimentation controls should be designed in accordance with the
  most current edition of the Virginia Erosion and Sediment Control Handbook.
  These controls should be in place prior to clearing and grading, and maintained
  in good working order to minimize impacts to state waters. The controls should
  remain in place until the area is stabilized.
- Place heavy equipment, located in temporarily impacted wetland areas, on mats, geotextile fabric, or use other suitable measures to minimize soil disturbance, to the maximum extent practicable.
- Restore all temporarily disturbed wetland areas to pre-construction conditions and plant or seed with appropriate wetlands vegetation in accordance with the cover type (emergent, scrub-shrub, or forested). The applicant should take all appropriate measures to promote revegetation of these areas. Stabilization and restoration efforts should occur immediately after the temporary disturbance of each wetland area instead of waiting until the entire project has been completed.
- Place all materials which are temporarily stockpiled in wetlands, designated for
  use for the immediate stabilization of wetlands, on mats, geotextile fabric in order
  to prevent entry in State waters. These materials should be managed in a
  manner that prevents leachates from entering state waters and must be entirely
  removed within thirty days following completion of that construction activity. The
  disturbed areas should be returned to their original contours, stabilized within
  thirty days following removal of the stockpile, and restored to the original
  vegetated state.
- All non-impacted surface waters within the project or right-of-way limits that are
  within 50 feet of any clearing, grading, or filling activities should be clearly
  flagged or marked for the life of the construction activity within that area. The
  project proponent should notify all contractors that these marked areas are
  surface waters where no activities are to occur.
- Measures should be employed to prevent spills of fuels or lubricants into state waters.
- **2. Subaqueous Lands.** The SEIS does not include a discussion of potential project impacts on state subaqueous lands.
- **2(a) Agency Jurisdiction.** The Virginia Marine Resources Commission (VMRC), pursuant to Section 28.2-1200 *et seq.* of the *Code of Virginia*, has jurisdiction over any encroachments in, on, or over any state-owned rivers, streams, or creeks in the Commonwealth.

**2(b) Agency Comments.** VMRC did not respond to our request for comments on the SEIS. However, in previous responses to the ESP EIS (DEQ #06-125F) and federal consistency certification (DEQ #05-079F) VMRC asserted that the agency's permit jurisdiction would extend to the portions of the project which result in direct impacts and encroachment to the historic stream channel of the North Anna River (Ellis/Madden, 8/31/06).

Questions on this jurisdiction may be directed to the Commission (Jeff Madden or Ben McGinnis, telephone (757) 247-2200).

3. Water Resources Management. The SEIS (page 2-23, 2.7.2.1) notes that Dominion has agreed to conduct an Instream Flow Incremental Methodology (IFIM) study of the North Anna River below the dam. This study is required by the Commonwealth of Virginia to enable preparation of the Coastal Zone Management Act consistency determination that is required prior to the issuance of a COL. Study design, analysis, and interpretation were done in cooperation and consultation with the Virginia Department of Game and Inland Fisheries (DGIF) and DEQ. According to the document, the primary objective of the North Anna IFIM study is to determine whether any changes (generally reductions) in dam releases as a result of the proposed Unit 3 operation could have an impact on aquatic resources below the dam. The NRC will review the final results of the completed IFIM and incorporate them into the final SEIS, as appropriate.

## 3(a) Agency Comments on IFIM Study.

(i) DGIF. Upon review of the Early Site Permit and associated federal consistency certification for the proposed addition of a third reactor at North Anna Power Station, DGIF expressed concerns about the operation of the third reactor and the reservoir as they relate to maintenance of downstream flows in the North Anna and Pamunkey rivers. To address agency concerns, DGIF and other state resource agencies recommended that Dominion perform an Instream Flow Incremental Methodology study in the North Anna River below the Lake Anna dam and in downstream waters of the Pamunkey River. DGIF worked closely with Dominion and the permitting agencies on the design of the study and the analysis of the results. As stated in the SEIS, the primary goal of the IFIM is to determine whether possible changes in dam releases resulting from the operation of the third reactor are likely to adversely impact aquatic resources below the dam.

The IFIM is complete and DGIF is currently working with Dominion, the permitting agencies, and other natural resource agencies to finalize the results and develop operating rules for the proposed third reactor (including reservoir management procedures) that reduce the frequency of dam

releases below 40 cubic feet per second (cfs), thereby protecting downstream aquatic resources.

- (ii) **DEQ.** According to the DEQ Office of Surface and Ground Water Supply Planning (OSGSP), DEQ, DGIF, DCR and Dominion have been working on the IFIM study that was required as result of the state's conditional Coastal Zone Management Act (CZMA) certification for the Early Site Permit. Based on the study, Dominion proposed a set of rules for operating the reservoir and the cooling system of Unit 3 that would mitigate the impact of the new unit on water resources. In summary, the proposal involves:
  - raising the normal level of the lake by three inches;
  - releasing a minimum flow of 40 cubic feet per second (cfs) whenever the lake is above 248 feet;
  - releasing a minimum flow of 20 cfs whenever the lake is less than 248 feet;
  - operating in maximum water conservation mode whenever the lake is below 250 feet; and
  - making a targeted recreation release of 177 cfs in June and July if the lake is above 250 feet.

#### Recreation

The recreation release would begin on Friday afternoon or evening and last for about 18 hours. This pulse of water is designed to be present in the most popular recreational boating reach during the daylight hours on Saturday. These mitigation measures were designed to protect lake levels, protect aquatic life and enhance river recreation if water storage was in good condition. An additional benefit of the pulse is that it would temporarily improve fish habitat and restore some of the natural variability to river's summer hydrologic regime.

#### Wetlands

Dominion also studied the impact of the three-inch rise in normal lake levels on docks and on fringe wetlands around the lake. Preliminary indications are the three-inch rise will have small impacts on docks and wetlands.

#### **Fisheries**

The North Anna River is a highly altered system with the minimum release of 40 cfs becoming the typical flow for most of the summer and fall. The historic minimum flow of 40 cfs and the lack of turbidity in the release produced a

fairly good sports fishery in the river below the dam. The weighted useable area graphs produced by the instream flow study were very important in forming preliminary recommendations for operating the project. These curves show sharply falling habitat as flow declines below 100 cfs for several important species. The state agencies do not support an increased frequency or duration of flows below 40 cfs, if avoidable, because of the precipitous decline in habitat that occurs as flow falls below these levels.

With the three inch rise, and the early activation of dry cooling, the additional occurrences of releases of below 40 cfs will be limited. Dominion presented information to the agencies on December 15, 2008 that estimated that the amount of time that flows would be less than 40 cfs would be 5.5% of the time, an increase from 5.2% of the time with the present two units. OSGSP believes that this is a small change.

Dominion's preliminary proposal for minimum releases is nearly identical with the proposal analyzed by NRC in the ESP EIS (i.e. 40 or 20 CFS depending on whether the lake was above or below 248 feet). The NRC concludes, in the SEIS and in the previous EIS for the ESP, that Unit 3 would have small or moderate impacts on lake levels and downstream flows.

**3(b) Findings.** The draft SEIS does not factor in the effect of a potential three inch rise in normal lake storage. This mitigating measure will further reduce the impacts of Unit 3 on lake levels and downstream flow.

## **3(c) Recommendations.** DEQ-OSGSP offers the following recommendations:

- Dominion should continue to coordinate with DEQ regarding the evaluation of potential impact the three-inch rise may have on wetlands.
- Should the size or scope of the project change, additional review by DEQ may be necessary.
- Dominion should strictly adhere to erosion and sediment controls and stormwater management practices, and monitor construction activities to ensure that erosion and stormwater management practices are adequately preventing sediment and pollutant migration into surface waters, including wetlands.

The DEQ Northern Regional Office will make the final permit decision regarding potential impacts to state waters.

**3(d) Conclusion.** DGIF will continue to work with Dominion, the permitting agencies, and other natural resource agencies to develop operating rules that avoid adverse impacts upon downstream resources, including recreational uses, or to mitigate unavoidable impacts. Possible impacts upon protected species and the waters that

support them will be considered in DGIF's final comments and recommendations resulting from review of the IFIM results.

- **4. Wildlife Resources and Protected Species.** According to the SEIS (page 4-10, section 4.4.3) the information and associated impacts for wildlife resources and protected species are provided and resolved in Section 4.4.3 of the ESP EIS (NRC 2006). Based on the staff's analysis, construction, operation and cumulative impacts to threatened or endangered species were considered small.
- **3(a) Agency Jurisdiction.** The Department of Game and Inland Fisheries (DGIF), as the Commonwealth's wildlife and freshwater fish management agency, exercises enforcement and regulatory jurisdiction over wildlife and freshwater fish, including state or federally listed endangered or threatened species, but excluding listed insects (*Virginia Code* Title 29.1). The DGIF is a consulting agency under the U.S. Fish and Wildlife Coordination Act (16 U.S.C. sections 661 et seq.), and provides environmental analysis of projects or permit applications coordinated through DEQ and several other state and federal agencies. DGIF determines likely impacts upon fish and wildlife resources and habitat, and recommends appropriate measures to avoid, reduce, or compensate for those impacts.

## 4(b) Agency Comments.

## Federal- and State-listed Species

According to DGIF data and those from the Department of Conservation and Recreation (DCR), downstream waters have been known to support:

- dwarf wedgemussel (federally-listed endangered);
- James spinymussel (federally-listed endangered);
- · Atlantic pigtoe (state-listed endangered); and
- green floater (state-listed threatened).

#### Reactor Site

According to DGIF records, listed wildlife resources under DGIF's jurisdiction are not documented from the site proposed for placement of the third reactor. Therefore, impacts upon listed wildlife resources are not likely to result from site preparation or construction of the third reactor.

#### 500 kV Transmission Line

DGIF reviewed the proposed corridor for the additional 500kV line required to carry the output of the existing Lake Anna units and the proposed third unit. DGIF does not

currently document any listed wildlife or resources under its jurisdiction from the project area. Therefore, impacts upon such species and resources are not likely to result from the construction of this line. In addition, as this new line will be co-located within an existing power line corridor, it does not appear that significant wildlife habitat alterations will occur.

- **4(c) Recommendations.** DGIF offers the following recommendations for the protection of wildlife resources during project construction:
  - Adhere to erosion and sediment controls for all land-disturbing activities.
  - · Conduct any in-stream activities during low or no-flow conditions.
  - Use non-erodible cofferdams to isolate the construction area.
  - Block no more than 50% of the streamflow at any given time.
  - Stockpile excavated material in a manner that prevents reentry into the stream.
  - · Restore original streambed and streambank contours.
  - · Revegetate barren areas with native vegetation.
  - Construct stream crossings via clear-span bridges when applicable due to future maintenance costs associated with culverts and the loss of riparian and aquatic habitat.
- **5. Natural Heritage Resources.** The SEIS does not include a discussion of natural heritage resources. However, the document (page 2-17, section 2.7.1.4) states that the NRC expects Dominion to work with the Commonwealth, including the Department of Conservation and Recreation's Natural Heritage Program, on development and implementation of any required monitoring programs.
- **5(a) Agency Jurisdiction** The mission of the Virginia Department of Conservation and Recreation is to conserve Virginia's natural and recreational resources. DCR supports a variety of environmental programs organized within seven divisions including the Division of Natural Heritage. The Natural Heritage Program's (DCR-DNH) mission is conserving Virginia's biodiversity through inventory, protection, and stewardship. The *Virginia Natural Area Preserves Act*, 10.1-209 through 217 of the *Code of Virginia*, was passed in 1989 and codified DCR's powers and duties related to statewide biological inventory: maintaining a statewide database for conservation planning and project review, land protection for the conservation of biodiversity, and the protection and ecological management of natural heritage resources (the habitats of rare, threatened, and endangered species, significant natural communities, geologic sites, and other natural features).
- **5(b) Agency Comments.** DCR-DNH searched its Biotics Data System for occurrences of natural heritage resources from the project site. Biotics historically documents the presence of natural heritage resources in the project area. However, due to the scope

of the activity and the distance to the resources, DCR-DNH does not anticipate that this project will adversely impact these natural heritage resources.

**5(c) State-listed Plant and Insect Species.** The *Endangered Plant and Insect Species Act* of 1979, Chapter 39 §3.1-1020 through 1030 of the *Code of Virginia*, as amended, authorizes the Virginia Department of Agriculture and Consumer Services (VDACS) to conserve, protect, and manage endangered and threatened species of plants and insects. The VDACS Virginia Endangered Plant and Insect Species Program personnel cooperates with the U.S. Fish and Wildlife Service (USFWS), DCR-DNH and other agencies and organizations on the recovery, protection or conservation of listed threatened or endangered species and designated plant and insect species that are rare throughout their worldwide ranges. In those instances where recovery plans, developed by USFWS, are available, adherence to the order and tasks outlined in the plans are followed to the extent possible.

## Small Whorled Pogonia

VDACS notes that the SEIS lists several federal- and state-listed endangered and threatened species within the scope of the project area. The small whorled pogonia is not generally found in wetland habitat at described in the SEIS (page 5-13, section 5.4.3.1). The species occurs on upland sites in mixed deciduous or mixed deciduous and coniferous forests that are generally in second- or third-growth successional stages

- **5(d) State Natural Area Preserves.** DCR files do not indicate the presence of any State Natural Area Preserves under the agency's jurisdiction in the project vicinity.
- **5(e) Recommendations.** DCR-DNH and VDACS offer the following recommendations for this proposal:
  - Contact DCR-DNH, Rene Hypes at (804) 371-2708 for an update on natural heritage information if a significant amount of time passes before the project is initiated since new and updated information is continually added to Biotics.
  - The final SEIS should include a discussion of the small whorled pogonia as it occurs on upland sites.
- **6. Erosion and Sediment Control and Stormwater Management.** According to the SEIS (page 4-25, 4.10), measures and controls to limit adverse impacts during construction, including erosion and sediment control, were addressed in Section 4.10 of the ESP EIS (NRC 2006). These measures and controls have been incorporated into the Environmental Protection Plan (EPP) for the site that is included as Appendix 1A of the COL ER (Dominion 2007a). Similarly, stormwater management is incorporated in the EPP.

- **6(a) Agency Jurisdiction.** DCR's Division of Soil and Water Conservation (DSWC) administers the *Virginia Erosion and Sediment Control Law and Regulations* (*VESCL&R*) and *Virginia Stormwater Management Law and Regulations* (*VSWML&R*).
- **6(b) Erosion and Sediment Control Plan.** According to DCR-DSWC, the property owner is responsible for submitting a project-specific erosion and sediment control (ESC) plan to Louisa County for review and approval pursuant to the local ESC requirements, if the project involves a land-disturbing activity of equal to or greater than 10,000 square feet. Depending on local requirements the area of land disturbance requiring an ESC plan may be less. The ESC plan must be approved by the locality prior to any land-disturbing activity at the project site. All regulated land-disturbing activities associated with the project, including on and off site access roads, staging areas, borrow areas, stockpiles, and soil intentionally transported from the project must be covered by the project specific ESC plan. Local ESC program requirements must be requested through Louisa County. [Reference: *Virginia Erosion and Sediment Control Law* §10.1-563; *Virginia Erosion and Sediment Control Regulations* 4 VAC 50-30-30 and 4 VAC 50-30-40]
- **6(c) Stormwater Management Plan.** Dependent on local requirements, a Stormwater Management (SWM) plan may be required. Local SWM program requirements must be requested through Louisa County. [Reference: Virginia Stormwater Management Act §10.1-603.3; Virginia Stormwater Management (VSMP) Permit Regulations 4 VAC50-60-110]
- **6(d) Virginia Stormwater Management Program General Permit for Stormwater Discharges from Construction Activities.** DCR is responsible for the issuance, denial, revocation, termination and enforcement of the Virginia Stormwater Management Program General Permit for Stormwater Discharges from Construction Activities related to municipal separate storm sewer systems (MS4s) and construction activities for the control of stormwater discharges from MS4s and land disturbing activities under the Virginia Stormwater Management Program.

The operator or owner of construction activities involving land disturbance of equal to or greater than one acre are required to register for coverage under the General Permit for Discharges of Stormwater from Construction Activities and develop a project-specific stormwater pollution prevention plan (SWPPP). Construction activities requiring registration also includes land disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan of development will ultimately disturb equal to or greater than one acre. The SWPPP must be prepared prior to submission of the registration statement for coverage under the general permit and the SWPPP must address water quality and quantity in accordance with the *Virginia Stormwater Management Program Permit Regulations*.

General information and registration forms for the general permit are available on DCR's website at <a href="http://www.dcr.virginia.gov/soil\_&\_water/vsmp.shtml">http://www.dcr.virginia.gov/soil\_&\_water/vsmp.shtml</a>. [Reference: Virginia Stormwater Management Act §10.1-603.1 et seq.; and VSMP Permit Regulations 4 VAC-50 et seq.]

- 7. Air Pollution Control. Measures and controls to limit adverse air impacts during construction were addressed in Section 4.10 of the ESP EIS (NRC 2006) and incorporated into the Environmental Protection Plan (EPP) for the site that is included as Appendix 1A of the COL ER (Dominion 2007a) (SEIS page 4-25, section 4.10). The document (page 5-2, section 5.2) indicates that the meteorological and air quality impacts from operation of the proposed closed cycle, combination wet and dry cooling system for Unit 3 would be limited to those resulting from the cooling system and periodic pollutant emissions from auxiliary boilers and generators that would support the unit.
- **7(a) Agency Jurisdiction.** DEQ's Air Quality Division, on behalf of the State Air Pollution Control Board, is responsible to develop regulations that become *Virginia's Air Pollution Control Law.* DEQ is charged to carry out mandates of the state law and related regulations as well as Virginia's federal obligations under the *Clean Air Act* as amended in 1990. The objective is to protect and enhance public health and quality of life through control and mitigation of air pollution. The division ensures the safety and quality of air in Virginia by monitoring and analyzing air quality data, regulating sources of air pollution, and working with local, state and federal agencies to plan and implement strategies to protect Virginia's air quality. The appropriate regional office is directly responsible for the issue of necessary permits to construct and operate all stationary sources in the region as well as to monitor emissions from these sources for compliance. As a part of this mandate, the environmental documents of new projects to be undertaken in the state are also reviewed. In the case of certain projects, additional evaluation and demonstration must be made under the general conformity provisions of state and federal law.

# 7(b) Agency Comments.

#### Ozone Attainment Area

The project site is located in a designated ozone attainment area. Precursors to ozone  $(O_3)$  pollution include volatile organic compounds (VOCs) and oxides of nitrogen  $(NO_x)$ . However, due to the proximity of the site to Spotsylvania and Hanover counties, which are designated as ozone maintenance areas, Dominion should take all reasonable precautions to limit emissions of VOCs and  $NO_x$ , principally by controlling or limiting the burning of fossil fuels.

## Fugitive Dust

Fugitive dust must be kept to a minimum by using control methods outlined in 9 VAC 5-50-60 et seq. of the *Regulations for the Control and Abatement of Air Pollution*. These precautions include, but are not limited to, the following:

- Use, where possible, of water or chemicals for dust control;
- Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials;
- Covering of open equipment for conveying materials; and
- Prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion.

## Open Burning

If project activities include the burning of construction material, this activity must meet the requirements under 9 VAC 5-40-5600 et seq. of the *Regulations* for open burning, and it may require a permit. The *Regulations* provide for, but do not require, the local adoption of a model ordinance concerning open burning. Dominion should contact Louisa County officials to determine what local requirements, if any, exist. The model ordinance includes, but is not limited to, the following provisions:

- All reasonable effort shall be made to minimize the amount of material burned, with the number and size of the debris piles;
- The material to be burned shall consist of brush, stumps and similar debris waste and clean-burning demolition material;
- The burning shall be at least 500 feet from any occupied building unless the occupants have given prior permission, other than a building located on the property on which the burning is conducted;
- The burning shall be conducted at the greatest distance practicable from highways and air fields;
- The burning shall be attended at all times and conducted to ensure the best possible combustion with a minimum of smoke being produced;
- The burning shall not be allowed to smolder beyond the minimum period of time necessary for the destruction of the materials; and
- The burning shall be conducted only when the prevailing winds are away from any city, town or built-up area.

## Fuel Burning Equipment

The installation of any fuel burning equipment (e.g. boilers and generators), may require permitting from DEQ prior to beginning construction of the facility (9 VAC 5-80, Article 6, Permits for New and Modified Sources). This would include cooling towers as there

may be issues with VOC emissions resultant from additives to make-up water, or particulate emissions from the cooling towers that may require air permitting. The project proponent should contact DEQ-NRO for guidance on whether this provision applies.

- **7(c) Findings.** According to DEQ-NRO, the SEIS does not thoroughly discuss air permit requirements.
- **7(d) Requirements.** Dominion must contact DEQ-NRO prior to construction activities and operation to review applicable air permit requirements.
- 8. Solid and Hazardous Wastes and Hazardous Materials. According to the SEIS (page 3-11, section 3.2.4.3), non-radioactive solid wastes (e.g., construction debris) would be handled in compliance with appropriate state and federal regulations.
- **8(a) Agency Jurisdiction.** Solid and hazardous wastes in Virginia are regulated by the Virginia Department of Environmental Quality, the Virginia Waste Management Board (VWMB) and the U.S. Environmental Protection Agency. They administer programs created by the federal *Resource Conservation and Recovery Act, Comprehensive Environmental Response Compensation and Liability Act*, commonly called Superfund, and the *Virginia Waste Management Act*. DEQ administers regulations established by the VWMB and reviews permit applications for completeness and conformance with facility standards and financial assurance requirements. All Virginia localities are required, under the Solid Waste Management Planning Regulations, to identify the strategies they will follow on the management of their solid wastes to include items such as facility siting, long-term (20-year) use, and alternative programs such as materials recycling and composting.
- **8(b) Agency Comments**. DEQ's Waste Division staff determined that both solid and hazardous waste issues were addressed in the report. A geographic information system (GIS) database search did not reveal any waste sites within a half mile radius that would impact or be impacted by construction activities at the project site.

The Waste Division performed a cursory review of DEQ data files and determined that there are several hazardous waste and solid waste sites located in the same zip code. These are as follows.

#### Hazardous Waste Site

 North Anna Power Station (VAD065376279), a treatment, storage and disposal facility (TSDF)

#### Solid Waste Sites

- Louisa County Sanitary Landfill, solid waste permit (SWP) 134, a closed sanitary landfill
- Louisa County Sanitary Landfill, SWP 194, a sanitary landfill
- Louisa County Sanitary Landfill, SWP 567, a sanitary landfill
- **8(c) Waste Management.** Any soil that is suspected of contamination or wastes that are generated during construction-related activities must be tested and disposed of in accordance with applicable federal, state, and local laws and regulations.
- **8(d) Asbestos-containing Material and Lead-based Paint.** Any structures being demolished, renovated, or removed, should be checked for asbestos-containing materials (ACM) and lead-based paint (LBP) prior to demolition. If ACM or LBP are found, in addition to the federal waste-related regulations mentioned above, state regulations 9VAC 20-80-640 for ACM and 9VAC 20-60-261 for LBP must be followed.
- **8(e) Recommendations.** The DEQ Waste Division recommends the following:
  - Access the following website to locate additional information on hazardous waste and solid waste sites using their identification numbers:
    - o <a href="http://www.epa.gov/superfund/sites/cursites/index.htm">http://www.epa.gov/superfund/sites/cursites/index.htm</a> or.
  - Implement pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes generated. All generation of hazardous wastes should be minimized and handled appropriately.
- **8(f) Requirement.** If the construction of this project will include the use of portable fuel AST(s) with a capacity of greater than 660 gallons, the tank(s) must be registered with DEQ using AST Registration Form 7540-AST.
- **9. Pesticides and Herbicides.** DEQ recommends that the use of herbicides or pesticides for construction or landscape maintenance should be in accordance with the principles of integrated pest management. The least toxic pesticides that are effective in controlling the target species should be used. Contact the Department of Agriculture and Consumer Services at (804) 786-3501 for more information.
- 10. Forest Resources. According to the SEIS (page 4-6, section 4.4.1), the current plant design and layout for Unit 3 indicates that approximately 125 acres of forested habitat would be lost (Dominion 2008a). All of this habitat is relatively recent regrowth and contains no unique or sensitive plant species or communities. Furthermore, the document (page 4-7, section 4.4.1) states that the new transmission line will be

constructed in the existing North Anna to Ladysmith right-of-way. No additional clearing of forested vegetation will be required for construction of the transmission line.

- **10(a) Agency Jurisdiction.** The mission of the Virginia Department of Forestry (VDOF) is to protect and develop healthy, sustainable forest resources for Virginians. VDOF was established in 1914 to prevent and suppress forest fires and reforest bare lands. Since the Department's inception, it has grown and evolved to encompass other protection and management duties including: protecting Virginia's forests from wildfire, protecting Virginia's waters, managing and conserving Virginia's forests, managing state-owned lands and nurseries, and managing regulated incentive programs for forest landowners.
- **10(b) Agency Findings.** The Department of Forestry finds that proposed clearing of 125 acres of timberland for the Unit 3 footprint, and the 80 acre proposed clearing due to construction will have a significant impact on the forest resources of the Commonwealth.
- **10(c) Agency Recommendations.** VDOF recommends that the proposed clearing due to construction be mitigated. Potential opportunities for mitigation include but are not limited to:
  - Plant open company lands within Virginia to create forested stands.
  - Work with VDOF to develop a cost share program to assist private landowners statewide, to reforest harvested timberlands or plant open lands with pine or hardwood seedlings. This mitigation program would be funded by Dominion.
  - Work with VDOF, or other Virginia conservation agency or group, to create a
    forest land conservation fund to be used for the purchase of conservation
    easements or property acquisitions of forested lands. These purchases could be
    statewide and would ensure that the forested lands are managed and retained
    as working forest lands.
  - Mitigation should achieve a ratio in excess of 1 to 1, more than one acre of land reforested or protected to every one acre cleared, for power-line right-of-way.
     Therefore, Dominion would assist landowners in the conservation, reforestation or purchase of at least 200+ acres within the county area or statewide.
- **11. Water Supply.** The SEIS (page 2-36, section 2.8.2.6) includes a review of major public water supply systems in the region.
- **11(a) Agency Jurisdiction.** The Virginia Department of Health (VDH), Office of Drinking Water (ODW) reviews projects for the potential to impact public drinking water sources (groundwater wells and surface water intakes).

- 11(b) Agency Comments. VDH-ODW states that there are four groundwater wells within one mile of the project site. The North Anna Power Plant operates wells 4, 6, 7 and the Information Center well. Impact to these wells may occur as a result of construction. There are no surface water intakes within a five-mile radius of the site.
- **11(c) Recommendation.** VDH-ODW recommends that the NAPS waterworks system operator be notified prior to any ground disturbance or changes in discharge patterns at the facility.

Contact Barry Matthews, VDH at (804) 864-7515 for additional information.

- 12. Geologic and Mineral Resources. According to the SEIS (page 2-6, section 2.4), the proposed Unit 3 site is underlain by rocks of the Ta River Metamorphic Suite, which extends thousands of feet below the ground surface. The crystalline metamorphic rocks near the ground surface have undergone extensive weathering to create a layer of saprolite about 100 feet thick beneath the site. The geotechnical properties of the saprolite are unsuitable for use as a structural fill material for plant construction, and excavated material will have to be removed to another location (NRC 2006a).
- **12(a) Agency Jurisdiction.** The mission of the DMME, Division of Mineral Resources (DMR) is to enhance the development and conservation of energy and mineral resources in a safe and environmentally sound manner to support a more productive economy in Virginia. Serving as Virginia's geological survey, DMME-DMR generates, collects, compiles, and evaluates geologic data, creates and publishes geologic maps and reports, works cooperatively with other state and federal agencies, and is the primary source of information on geology, mineral and energy resources, and geologic hazards for both the mineral and energy industries and the general public. DMME-DMR also provides the necessary geologic support for those divisions of DMME that regulate the permitting of new mineral and fuel extraction sites, miner safety, and land reclamation.
- **12(b) Agency Comments.** DMME finds that the project does not pose a significant impact to the availability of mineral resources.

For additional information, contact Matt Heller, DMME at (434)

- 13. Historic Structures and Archaeological Resources. According to the SEIS (page 4-17, section 4.6) there are four historic resource sites in the area of the proposed Unit 3. Dominion has planned construction activities to avoid all four cultural resource locations (Dominion 2008a).
- **13(a) Agency Jurisdiction.** The Department of Historic Resources (DHR) conducts reviews of projects to determine their effect on historic structures or cultural resources under its jurisdiction. DHR, as the designated State's Historic Preservation Office,

ensures that federal actions comply with Section 106 of the National Historic Preservation Act of 1962 (NHPA), as amended, and its implementing regulation at 36 CFR Part 800. The NHPA requires federal agencies to consider the effects of federal projects on properties that are listed or eligible for listing on the National Register of Historic Places. Section 106 also applies if there are any federal involvements, such as licenses, permits, approvals or funding.

- **13(b) Agency Comments.** DHR finds that the SEIS accurately reflects consultation to date and adequately addresses agency concerns. DHR strongly supports Dominion's commitments in the SEIS (section 4.6) which will provide for the continued consideration and protection of historic properties.
- **13(c) Requirement.** If the NRC and Dominion are unable or unwilling to abide by the commitments, additional consultation on the impacts of the COL on historic properties will be necessary pursuant to *Section 106*.
- **13(d) Conclusion.** Provided the commitments are met, DHR finds that a determination of no adverse effect to historic properties is appropriate.

For additional information, contact Roger Kirchen, DHR at (804) 367-2323, ext. 153.

- 14. Transportation Impacts. The document (page 4-14, section 4.5.4.1) notes that the NRC concluded in the ESP EIS that if the planned upgrades and improvements to the road systems in the region are implemented, the temporary impacts of construction on transportation in the region would be small to moderate, and further mitigation beyond the actions stated above would not be warranted. Furthermore, the document (page 5-19, section 5.5.4.1) states that new information since the ESP EIS was prepared indicates that although the overall population in the region of the NAPS site is growing more rapidly than estimated in the ESP EIS, the operations workforce for Unit 3 will be smaller than contemplated in the ESP EIS (500 workers rather than 720).
- **14(a) Agency Comments.** According to VDOT, while the comments provided below are presented by county, the comments should not necessarily be considered county-specific.

### Hanover County

Despite the conclusion in the SEIS (page 5-19, section 5.5.4.1) that the transportation impacts may be small, it is not possible to determine the impact of the project on Hanover County until more detailed information on the distribution of traffic is provided. This development is in a rural area where the impacts on these low-volume roads may be relatively higher than in an urban area. Note that VDOT does not normally make temporary improvements for construction-related traffic as the SEIS (page 5-19, section 5.5.4.1) appears to suggest.

## Spotsylvania County

Based on the information provided, it was also difficult to determine transportation impacts in Spotsylvania County. Availability of the traffic management plan, and VDOT's role, referenced in the document would assist in further evaluation. VDOT anticipates that the road network should be able to handle the addition of 500 employees. However, overweight loads due to construction traffic, may cause excessive impacts to the surrounding road system and road improvements or road repair may be required. A funding source for this work has not been addressed in the SEIS. Note that some of the planned road improvements that would serve this site no longer have public funds allocated, delaying the proposed work.

- **14(b) Recommendations.** VDOT recommends that the final SEIS should include a discussion and analysis of the following:
  - The expected traffic distribution (for construction-related traffic and for operations) and the effects upon the state highways and intersections.
  - Where construction workers and additional employees will be housed, routes traveled to work, and the number of work shifts.
  - An updated evacuation plan that addresses the area of impact in the event of an emergency is desired based on the proposed improvements described in the SEIS.

For additional information regarding these comments, contact Melanie Allen, VDOT at (804) 786-0868.

- 15. Emergency Planning. According to the SEIS (page 1-4, section 1.1.2), the NRC analyzes the safety characteristics of the proposed site and emergency planning information in a Safety Evaluation Report (SER). The SER presents the conclusions reached by the NRC regarding (1) whether there is reasonable assurance that an ESBWR can be constructed and operated at the NAPS site without undue risk to the health and safety of the public; and (2) whether the emergency preparedness program meets the applicable requirements in 10 CFR Part 50, 10 CFR Part 52, 10 CFR Part 73, and 10 CFR Part 100. The SER review is separate from the environmental review process.
- **15(a) Agency Review.** The Virginia Department of State Police (DSP) and Virginia Department of Emergency Management (DEM) did not respond to DEQ's request for comments on the SEIS.

**15(b) Recommendation.** DEQ recommends that NRC coordinate the development of the SER with DEM and DSP and provide them the opportunity to review and comment on the final document.

## 16. Regional Planning District Review.

- **16(a) Agency Jurisdiction.** In accordance with the Code of Virginia, Section 15.2-4207, planning district commissions encourage and facilitate local government cooperation and state-local cooperation in addressing, on a regional basis, problems of greater than local significance. The cooperation resulting from this is intended to facilitate the recognition and analysis of regional opportunities and take account of regional influences in planning and implementing public policies and services. Planning district commissions promote the orderly and efficient development of the physical, social and economic elements of the districts by planning, and encouraging and assisting localities to plan, for the future.
- **16(b) Agency Comments.** The Thomas Jefferson Planning District Commission (TJPDC) reviewed the SEIS and has no comments. The George Washington Regional Commission and Rappahannock-Rapidan Planning District Commission did not respond to DEQ's request for comments on the SEIS.

Contact Rochelle Garwood, TJPDC at (434) 979-7310.

- 17. Local Review. DEQ distributes NEPA documents to the chief administrative officer of every locality potentially impacted by the proposal. The purpose of the distribution is to enable the locality to evaluate the proposed project for environmental impact, consistency with the locality's comprehensive plan, local ordinances and other applicable law and to provide the locality with an opportunity to comment. DEQ solicits their comments, and consider their responses in substantially the same manner as DEQ solicits and receives comments from state agencies.
- **17(a) Agency Response.** DEQ solicited comments on the SEIS from the Counties of Louisa, Orange, Spotsylvania and Hanover, and the Town of Mineral. However, no local comments on the proposal were received by DEQ.
- **18. Pollution Prevention**. DEQ advocates that principles of pollution prevention be used in all construction projects as well as in facility operations. Effective siting, planning, and on-site Best Management Practices (BMPs) will help to ensure that environmental impacts are minimized. However, pollution prevention techniques also include decisions related to construction materials, design, and operational procedures that will facilitate the reduction of wastes at the source.
- **18(a) Recommendations.** We have several pollution prevention recommendations that may be helpful in the construction of this project and in the operation of the facility:

- Consider development of an effective Environmental Management System (EMS). An effective EMS will ensure that the Dominion is committed to minimizing its environmental impacts, setting environmental goals, and achieving improvements in its environmental performance. DEQ offers EMS development assistance and it recognizes facilities with effective Environmental Management Systems through its Virginia Environmental Excellence Program.
- Consider environmental attributes when purchasing materials. For example, the
  extent of recycled material content, toxicity level, and amount of packaging
  should be considered and can be specified in purchasing contracts.
- Consider contractors' commitment to the environment (such as an EMS) when choosing contractors. Specifications regarding raw materials and construction practices can be included in contract documents and requests for proposals.
- Choose sustainable materials and practices for infrastructure construction and design. These could include asphalt and concrete containing recycled materials, and integrated pest management in landscaping, among other things.
- Integrate pollution prevention techniques into the airport maintenance and operation, to include the following: inventory control (record-keeping and centralized storage for hazardous materials), product substitution (use of nontoxic cleaners), and source reduction (fixing leaks, energy-efficient HVAC and equipment). Maintenance facilities should be designed with sufficient and suitable space to allow for effective inventory control and preventative maintenance.

DEQ's Office of Pollution Prevention provides information and technical assistance relating to pollution prevention techniques and EMS. For more information, contact DEQ's Office of Pollution Prevention, Sharon Baxter at (804) 698-4344.

#### FEDERAL CONSISTENCY UNDER THE COASTAL ZONE MANAGEMENT ACT

Pursuant to the Coastal Zone Management Act of 1972, as amended, Dominion is required to determine the consistency of its activities affecting Virginia's coastal resources or coastal uses with the Virginia Coastal Resources Management Program (VCP) (see section 307(c)(1) of the Act and 15 CFR Part 930, sub-part D, section 930.50 et seq.). This involves an analysis of the activities in light of the Enforceable Polices of the VCP (Attachment 1)), and submission of a consistency certification reflecting that analysis and committing Dominion to comply with the Enforceable Policies. This certification may be provided as part of the documentation concluding the NEPA SEIS review process, or independently, depending on Dominion's preference. We also invite Dominion to consider the VCP Advisory Policies (Attachment 2).

However, in accordance with 15 CFR Part 930, §930.66, federally permitted activities previously determined to be consistent with the VCP, but which have not yet begun, require further coordination by the applicant if the proposed activity will affect any coastal use or resource in a substantially different way than originally described. Substantially different coastal effects are reasonably foreseeable if the applicant makes substantial changes in the proposed activity that are relevant to VCP Enforceable Policies, or if there are significant new circumstances or information relevant to the proposed activity and the effects of that activity on any coastal use or resource. In the event that the referenced project affects any coastal use or resource in a substantially different way than originally described, Dominion must notify DEQ through a supplemental consistency certification.

If you need clarification of these comments, please contact Ellie Irons at (804) 698-4325 or John Fisher at (804) 698-4339.

#### REGULATORY AND COORDINATION NEEDS

1. Water Quality and Wetland Impacts.

## Virginia Water Protection Permit

Water quality and wetland impacts associated with this proposal will require a Virginia Water Protection Permit issued by the DEQ Northern Regional Office pursuant to Virginia Code §62.1-44.15:5. Dominion's wetland delineation should be confirmed by the Corps. A Joint Permit Application may be obtained from and submitted to the Virginia Marine Resources Commission which serves as a clearinghouse for the joint permitting process involving the VMRC, DEQ, Corps, and local wetlands boards. For additional information and coordination, contact Trisha Beasley, DEQ-NRO at (703) 583-3940.

## Virginia Pollutant Discharge Elimination System

The modification of Dominion's existing VPDES permit under *Virginia Code* 9 VAC 25-31 should be coordinated with DEQ-NRO. For additional information and coordination, contact Bryant Thomas, DEQ-NRO at (703) 583-3843.

**2. Water Resources Management.** Dominion should continue to work with DEQ, DGIF, DCR and other appropriate natural resource agencies on finalizing operating rules to avoid and mitigate adverse impacts upon downstream resources. For more information, contact Scott Kudlas, DEQ at (804) 698-4456; John Kaufman, DGIF at (434) 296-4731; and Robert Munson, DCR at (804) 786-6140.

- **3. Protected Plant Species.** Dominion should contact Keith Tignor, VDACS at (804) 786-3515 regarding the inclusion of information and analysis on the small whorled pogonia in the final SEIS.
- 4. Erosion and Sediment Control and Stormwater Management.
- **4(a) Erosion and Sediment Control, and Stormwater Management.** Construction must comply with *Virginia's Erosion and Sediment Control Law* (Virginia Code 10.1-567) and regulations (4 VAC 50-30-30 et seq.) and *Stormwater Management Law* (Virginia Code 10.1-603.5) and regulations (4 VAC 3-20-210 et seq.) as locally administered. Local erosion and sediment control, and stormwater management requirements should be coordinated with the Louisa County Department of Community Development Planning and Zoning Division at (540) 967-3430.
- **4(b) Virginia Stormwater Management Program General Permit for Stormwater Discharges from Construction Activities.** For projects involving land-disturbing activities equal to or greater than one acre, Dominion is required to apply for registration coverage under the Virginia Stormwater Management Program General Permit for Discharges of Stormwater from Construction Activities. Specific questions regarding the Stormwater Management Program requirements should be directed to Holly Sepety with DCR at (804) 225-2613.
- **5. Air Quality Regulations**. This project is subject to air regulations administered by the Department of Environmental Quality. The following sections of the Code of Virginia and Virginia Administrative Code are applicable:
  - 9 VAC 5-50-60 et seq. governing fugitive dust emissions; and
  - 9 VAC 5-40-5600 et seq., for open burning.

The installation of fuel burning equipment (e.g. boilers and generators), may require a permit (9 VAC 5-80, Article 6 Permits for New and Modified Sources) prior to beginning construction of a facility.

For more information and coordination contact Terry Darton, DEQ-NRO at (703) 583-3845. Also, contact local Louisa County officials for information on any local requirements pertaining to open burning

- **6. Solid and Hazardous Wastes**. All solid waste, hazardous waste, and hazardous materials must be managed in accordance with all applicable federal, state, and local environmental regulations. Some of the applicable state laws and regulations are:
  - Virginia Waste Management Act (Code of Virginia Section 10.1-1400 et seq.);
  - Virginia Hazardous Waste Management Regulations (VHWMR) (9VAC 20-60);

- Virginia Solid Waste Management Regulations (VSWMR) (9VAC 20-80); and
- Virginia Regulations for the Transportation of Hazardous Materials (9VAC 20-110).

Some of the applicable Federal laws and regulations are:

- Resource Conservation and Recovery Act (RCRA) (42 U.S.C. Section 6901 et seq.);
- Title 40 of the Code of Federal Regulations; and
- U.S. Department of Transportation Rules for Transportation of Hazardous materials (49 CFR Part 107).
- **6(a) Asbestos-Containing Material.** It is the responsibility of the owner or operator of a renovation or demolition activity, prior to the commencement of the renovation or demolition, to thoroughly inspect the affected part of the facility where the operation will occur for the presence of asbestos, including Category I and Category II nonfriable asbestos containing material (ACM). Upon classification as friable or non-friable, all waste ACM shall be disposed of in accordance with the Virginia Solid Waste Management Regulations (9 VAC 20-80-640), and transported in accordance with the Virginia regulations governing Transportation of Hazardous Materials (9 VAC 20-110-10 et seq.). Contact the DEQ Waste Management Program for additional information, (804) 698-4021, and the Department of Labor and Industry, Ronald L. Graham at (804) 371-0444.
- **6(b) Lead-Based Paint.** If applicable, the proposed project must comply with the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) regulations, and with the Virginia Lead-Based Paint Activities Rules and Regulations. For additional information regarding these requirements contact the Department of Professional and Occupational Regulation, David Dick at (804) 367-8588.
- **7. Storage Tank Registration.** Dominion must register portable ASTs (>660 gallons) associated with this proposed action with DEQ. Registration forms are available on DEQ's web site at <a href="http://www.deq.virginia.gov/tanks/fnf.html#forms">http://www.deq.virginia.gov/tanks/fnf.html#forms</a>. The registration should be mailed to the DEQ address listed on the form along with the listed registration fee. For additional information contact Cynthia Sale, DEQ Northern Regional Office at (703) 583-3830.
- **8. Forest Resources.** Dominion may contact Todd Groh, VDOF at (434) 977-6555, ext. 3344, regarding potential opportunities for mitigation of the loss of trees from forest clearing due to construction.

**9. Transportation Impacts.** Dominion should contact Melanie Allen, VDOT at (804) 786-0868, regarding additional information and analysis on potential traffic impacts of the proposal for the final SEIS.

Thank you for the opportunity to review the Draft Supplemental Environmental Impact Statement for the Combined License (COL) for North Anna Power Station Unit 3 in Louisa County. Detailed comments of reviewing agencies are attached for your review. Please contact me at (804) 698-4325 or John Fisher at (804) 698-4339 for clarification of these comments.

Sincerely,

Ellie Irons, Manager

Elle H

Office of Environmental Impact Review

#### **Enclosures**

CC: David Davis, DEQ-OWWP David Hartshorn, DEQ-NRO Paul Kohler, DEQ-ORP Tony Watkinson, VMRC Amy Ewing, DGIF Keith Tignor, VDACS Todd Groh, VDF Matt Heller, DMME Pam Mason, VIMS Ethel Eaton, DHR Barry Matthews, VDH Melanie Allen, VDOT Mike Cline, DEM Ronnie Rice, DSP Eugene Stockton, DSP Lee Lintecum, Louisa County Bill Rolfe, Orange County James Wheeler, Spotsylvania County Rhu Harris, Hanover County Willie Harper, Town of Mineral Billie Campbell, Thomas Jefferson PDC Robert Wilson, George Washington Regional Commission Jeffrey Walker, Rappahannock-Rapidan PDC



# COMMONWEALTH of VIRGINIA

L. Preston Bryant, Jr. Secretary of Natural Resources

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David K. Paylor

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## Attachment 1

## Enforceable Regulatory Programs comprising Virginia's Coastal Resources Management Program (VCP)

Fisheries Management - The program stresses the conservation and enhancement a. of finfish and shellfish resources and the promotion of commercial and recreational fisheries to maximize food production and recreational opportunities. This program is administered by the Marine Resources Commission (VMRC); Virginia Code 28.2-200 to 28.2-713 and the Department of Game and Inland Fisheries (DGIF); Virginia Code 29.1-100 to 29.1-570.

The State Tributyltin (TBT) Regulatory Program has been added to the Fisheries Management program. The General Assembly amended the Virginia Pesticide Use and Application Act as it related to the possession, sale, or use of marine antifoulant paints containing TBT. The use of TBT in boat paint constitutes a serious threat to important marine animal species. The TBT program monitors boating activities and boat painting activities to ensure compliance with TBT regulations promulgated pursuant to the amendment. The VMRC, DGIF, and Virginia Department of Agriculture Consumer Services (VDACS) share enforcement responsibilities; Virginia Code 3.1-249.59 to 3.1-249.62.

- Subaqueous Lands Management The management program for subaqueous b. lands establishes conditions for granting or denying permits to use state-owned bottomlands based on considerations of potential effects on marine and fisheries resources, tidal wetlands, adjacent or nearby properties, anticipated public and private benefits, and water quality standards established by the Department of Environmental Quality (DEQ). The program is administered by the Marine Resources Commission; Virginia Code 28.2-1200 to 28.2-1213.
- Wetlands Management The purpose of the wetlands management program is to C. preserve wetlands, prevent their despoliation, and accommodate economic development in a manner consistent with wetlands preservation.
  - (1) The tidal wetlands program is administered by the Marine Resources Commission; Virginia Code 28.2-1301 through 28.2-1320.
  - (2) The Virginia Water Protection Permit program administered by DEQ includes protection of wetlands --both tidal and non-tidal; Virginia Code §62.1-44.15:5 and Water Quality Certification pursuant to Section 401 of the Clean Water Act.

## Attachment 1 continued

## Page 2

- d. <u>Dunes Management</u> Dune protection is carried out pursuant to The Coastal Primary Sand Dune Protection Act and is intended to prevent destruction or alteration of primary dunes. This program is administered by the Marine Resources Commission; Virginia Code 28.2-1400 through 28.2-1420.
- e. Non-point Source Pollution Control (1) Virginia's Erosion and Sediment Control Law requires soil-disturbing projects to be designed to reduce soil erosion and to decrease inputs of chemical nutrients and sediments to the Chesapeake Bay, its tributaries, and other rivers and waters of the Commonwealth. This program is administered by the Department of Conservation and Recreation; Virginia Code 10.1-560 et.seq.).
  - (2) Coastal Lands Management is a state-local cooperative program administered by the DCR's Division of Chesapeake Bay Local Assistance and 84 localities in Tidewater (see i) Virginia; Virginia Code §10.1-2100 –10.1-2114 and 9 VAC10-20 et seq.
- f. <u>Point Source Pollution Control</u> The point source program is administered by the State Water Control Board (DEQ) pursuant to Virginia Code 62.1-44.15. Point source pollution control is accomplished through the implementation of:
  - (1) the National Pollutant Discharge Elimination System (NPDES) permit program established pursuant to Section 402 of the federal Clean Water Act and administered in Virginia as the Virginia Pollutant Discharge Elimination System (VPDES) permit program.
  - (2) The Virginia Water Protection Permit (VWPP) program administered by DEQ; Virginia Code §62.1-44.15:5 and Water Quality Certification pursuant to Section 401 of the Clean Water Act.
- g. <u>Shoreline Sanitation</u> The purpose of this program is to regulate the installation of septic tanks, set standards concerning soil types suitable for septic tanks, and specify minimum distances that tanks must be placed away from streams, rivers, and other waters of the Commonwealth. This program is administered by the Department of Health (Virginia Code 32.1-164 through 32.1-165).
- h. <u>Air Pollution Control</u> The program implements the federal Clean Air Act to provide a legally enforceable State Implementation Plan for the attainment and maintenance of the National Ambient Air Quality Standards. This program is administered by the State Air Pollution Control Board (Virginia Code 10-1.1300 through §10.1-1320).
- (i) <u>Coastal Lands Management</u> is a state-local cooperative program administered by the DCR's Division of Chesapeake Bay Local Assistance and 84 localities in Tidewater, Virginia established pursuant to the Chesapeake Bay Preservation Act; Virginia Code §10.1-2100 –10.1-2114 and Chesapeake Bay Preservation Area Designation and Management Regulations; Virginia Administrative Code 9 VAC10-20 et seq.

#### Attachment 2

## Advisory Policies for Geographic Areas of Particular Concern

- a. <u>Coastal Natural Resource Areas</u> These areas are vital to estuarine and marine ecosystems and/or are of great importance to areas immediately inland of the shoreline. Such areas receive special attention from the Commonwealth because of their conservation, recreational, ecological, and aesthetic values. These areas are worthy of special consideration in any planning or resources management process and include the following resources:
  - a) Wetlands
  - b) Aquatic Spawning, Nursery, and Feeding Grounds
  - c) Coastal Primary Sand Dunes
  - d) Barrier Islands
  - e) Significant Wildlife Habitat Areas
  - f) Public Recreation Areas
  - g) Sand and Gravel Resources
  - h) Underwater Historic Sites.
- b. <u>Coastal Natural Hazard Areas</u> This policy covers areas vulnerable to continuing and severe erosion and areas susceptible to potential damage from wind, tidal, and storm related events including flooding. New buildings and other structures should be designed and sited to minimize the potential for property damage due to storms or shoreline erosion. The areas of concern are as follows:
  - i) Highly Erodible Areas
  - ii) Coastal High Hazard Areas, including flood plains.
- c. <u>Waterfront Development Areas</u> These areas are vital to the Commonwealth because of the limited number of areas suitable for waterfront activities. The areas of concern are as follows:
  - i) Commercial Ports
  - ii) Commercial Fishing Piers
  - iii) Community Waterfronts

Although the management of such areas is the responsibility of local government and some regional authorities, designation of these areas as Waterfront Development Areas of Particular Concern (APC) under the VCRMP is encouraged. Designation will allow the use of federal CZMA funds to be used to assist planning for such areas and the implementation of such plans. The VCRMP recognizes two broad classes of priority uses for waterfront development APC:

- water access dependent activities;
- ii) activities significantly enhanced by the waterfront location and complementary to other existing and/or planned activities in a given waterfront area.

## Advisory Policies for Shorefront Access Planning and Protection

- a. <u>Virginia Public Beaches</u> Approximately 25 miles of public beaches are located in the cities, counties, and towns of Virginia exclusive of public beaches on state and federal land. These public shoreline areas will be maintained to allow public access to recreational resources.
- b. <u>Virginia Outdoors Plan</u> Planning for coastal access is provided by the Department of Conservation and Recreation in cooperation with other state and local government agencies. The Virginia Outdoors Plan (VOP), which is published by the Department, identifies recreational facilities in the Commonwealth that provide recreational access. The VOP also serves to identify future needs of the Commonwealth in relation to the provision of recreational opportunities and shoreline access. Prior to initiating any project, consideration should be given to the proximity of the project site to recreational resources identified in the VOP.
- c. <u>Parks, Natural Areas, and Wildlife Management Areas</u> Parks, Wildlife Management Areas, and Natural Areas are provided for the recreational pleasure of the citizens of the Commonwealth and the nation by local, state, and federal agencies. The recreational values of these areas should be protected and maintained.
- d. <u>Waterfront Recreational Land Acquisition</u> It is the policy of the Commonwealth to protect areas, properties, lands, or any estate or interest therein, of scenic beauty, recreational utility, historical interest, or unusual features which may be acquired, preserved, and maintained for the citizens of the Commonwealth.
- e. <u>Waterfront Recreational Facilities</u> This policy applies to the provision of boat ramps, public landings, and bridges which provide water access to the citizens of the Commonwealth. These facilities shall be designed, constructed, and maintained to provide points of water access when and where practicable.
- f. Waterfront Historic Properties The Commonwealth has a long history of settlement and development, and much of that history has involved both shorelines and near-shore areas. The protection and preservation of historic shorefront properties is primarily the responsibility of the Department of Historic Resources. Buildings, structures, and sites of historical, architectural, and/or archaeological interest are significant resources for the citizens of the Commonwealth. It is the policy of the Commonwealth and the VCRMP to enhance the protection of buildings, structures, and sites of historical, architectural, and archaeological significance from damage or destruction when practicable.

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